

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	2	"20050059633".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/21 10:02
L2	469	alternan	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/21 10:02
L3	77	l2 and food	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/21 11:48
L4	2	"5786196".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/21 10:11
L5	4	"6486314"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/21 12:23
L6	20	("20020035089" "20020035089" "20020037577" "4062950" "4689219" "4833128" "5605893" "5726291" "5753253" "5786196" "6207638").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/21 12:23
S1	2	reuteran	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 14:58

EAST Search History

S2	613	reuteri	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 14:51
S3	109	S2 and glucan	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/20 16:18
S4	2	"5605983".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/28 17:35
S5	2	"5605893".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/28 17:35
S6	2	"4693982".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/29 08:29
S7	22	reuteri same diet	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/21 09:58
S8	176	reuteri same (diet or food)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 14:54

EAST Search History

S9	14618	pullulan digestibility	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 14:55
S10	10	pullulan same digestibility	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 14:55
S11	526	pullulan same (food or diet)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 14:55
S12	104	noort.in.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 15:26
S13	425	glycogen with (diet or food)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 15:27
S14	262	S13 and obesity	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 15:30
S15	1175	glycogen.clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 15:30

EAST Search History

S16	53	glycogen.clm. and food.clm.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 16:09
S17	2	"20020035089".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/08/30 16:09
S18	18	("20020035089" "20020035089" "20020037577" "4062950" "4689219" "4833128" "5605893" "5726291" "5753253" "6207638").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/12/20 16:18

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NEWS	12	SEP 17	CA/CAPplus enhanced with printed CA page images from 1967-1998
NEWS	13	SEP 17	Caplus coverage extended to include traditional medicine patents
NEWS	14	SEP 24	EMBASE, EMBAL, and LEMBASE reloaded with enhancements
NEWS	15	OCT 02	CA/CAPplus enhanced with pre-1907 records from Chemisches Zentralblatt
NEWS	16	OCT 19	BEILSTEIN updated with new compounds
NEWS	17	NOV 15	Derwent Indian patent publication number format enhanced
NEWS	18	NOV 19	WPIX enhanced with XML display format
NEWS	19	NOV 30	ICSD reloaded with enhancements
NEWS	20	DEC 04	LINPADOCDB now available on STN
NEWS	21	DEC 14	BEILSTEIN pricing structure to change
NEWS	22	DEC 17	USPATOLD added to additional database clusters
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NEWS	25	DEC 17	TOXCENTER enhanced with 2008 MeSH vocabulary in MEDLINE segment
NEWS	26	DEC 17	MEDLINE and LMEMLINE updated with 2008 MeSH vocabulary
NEWS	27	DEC 17	CA/CAPplus enhanced with new custom IPC display formats
NEWS	28	DEC 17	STN Viewer enhanced with full-text patent content from USPATOLD

NEWS EXPRESS 19 SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2,
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.

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=> alternan

L1 3416 ALTERNAN

=> alternan (L) food

L2 47 ALTERNAN (L) FOOD

=> dup remove l2

PROCESSING COMPLETED FOR L2

L3 40 DUP REMOVE L2 (7 DUPLICATES REMOVED)

=> l3 and py<=2003

2 FILES SEARCHED...

L4 28 L3 AND PY<=2003

=> d l4 1-28 ibib abs

L4 ANSWER 1 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2003:644970 CAPLUS
DOCUMENT NUMBER: 139:380331

TITLE: Characterization of a novel modified alternan
 AUTHOR(S): Leathers, Timothy D.; Nunnally, Melinda S.; Ahlgren, Jeffrey A.; Cote, Gregory L.
 CORPORATE SOURCE: Agricultural Research Service, National Center for Agricultural Utilization Research, Fermentation Biotechnology Research Unit, US Department of Agriculture, Peoria, IL, 61604, USA
 SOURCE: Carbohydrate Polymers (2003), 54(1), 107-113
 CODEN: CAPOD8; ISSN: 0144-8617
 PUBLISHER: Elsevier Science B.V.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB A novel modified alternan, produced by using newly isolated strains of *Penicillium* sp., was phys. characterized. High mol. weight native alternan was progressively modified to lower mol. weight heterodisperse forms, associated with a reduction in absorbance at 225 nm, light scattering, and opalescence. Methylation anal. indicated that modified alternan has a linkage pattern similar to that of native alternan. The solution viscosity properties of modified alternan resemble those of ultrasonicated alternan and com. gum arabic. However, alternan lacks the emulsification capacity of gum arabic. Alternan solns. are stable for at least 7 days under all conditions tested, from 4 to 70° and from pH 3-9. Dry preps. of alternan are bright white powders that are not highly hygroscopic. Thus, modified alternan is promising for further development as a gum arabic substitute, particularly in food applications requiring a low-viscosity bulking agent.
 REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2002:864348 CAPLUS
 DOCUMENT NUMBER: 137:351615
 TITLE: *Penicillium* isolates for modifying alternan
 INVENTOR(S): Leathers, Timothy D.; Nunnally, Melinda S.; Cote, Gregory L.
 PATENT ASSIGNEE(S): United States Dept. of Agriculture, USA
 SOURCE: U.S., 21 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6479275	B1	20021112	US 2001-915153	20010725 <--
WO 2003010177	A1	20030206	WO 2002-US23775	20020725 <--
WO 2003010177	B1	20040708		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,

KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,
CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU 2002327349 A1 20030217 AU 2002-327349 20020725 <--
US 2003022319 A1 20030130 US 2002-235132 20020905 <--
US 7049105 B2 20060523
US 2006166336 A1 20060727 US 2006-387313 20060323
PRIORITY APPLN. INFO.: US 2001-915153 A 20010725
WO 2002-US23775 W 20020725
US 2002-235132 A3 20020905

AB Four new *Penicillium* spp. isolates (NRRL 21966, NRRL 21967, NRRL 21968, and NRRL 21969) are capable of essentially quant. conversion of native alternan to a polymeric modified form having a lower apparent mol. weight than native alternan. A 5th isolate (NRRL 30489) obtained from a survey of deposited organisms and classified as a *Penicillium* subgenus *Biverticillium* has the same ability. The modified alternan has rheol. properties similar to ultrasonicated alternan and is produced without the expense of ultrasonication. It would have utility as a substitute for gum arabic for uses such as bulking agents and extenders in foods and cosmetics.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2000:548791 CAPLUS

DOCUMENT NUMBER: 133:160569

TITLE: *Leuconostoc alternans*ucrase gene, transgenic plants, and production of alternan for use in cosmetics and food

INVENTOR(S): Kossmann, Jens; Welsh, Thomas; Quanz, Martin; Knuth, Karola

PATENT ASSIGNEE(S): Planttec Biotechnologie G.m.b.H. Forschung und Entwicklung, Germany; Max-Planck-Gesellschaft zur Foerderung der Wissenschaften E.V.

SOURCE: Ger. Offen., 64 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19905069	A1	20000810	DE 1999-19905069	19990208 <--
CA 2352492	A1	20000817	CA 2000-2352492	20000207 <--
WO 2000047727	A2	20000817	WO 2000-EP954	20000207 <--
WO 2000047727	A3	20001207		
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
EP 1151085	A2	20011107	EP 2000-910648	20000207 <--
EP 1151085	B1	20050831		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO

JP 2003522520	T	20030729	JP 2000-598627	20000207 <--
AU 776021	B2	20040826	AU 2000-32787	20000207
AT 303435	T	20050915	AT 2000-910648	20000207
ES 2246227	T3	20060216	ES 2000-910648	20000207
US 6570065	B1	20030527	US 2000-499203	20000208 <--
ZA 2001006474	A	20020213	ZA 2001-6474	20010807 <--
US 2003229923	A1	20031211	US 2003-417280	20030415 <--

PRIORITY APPLN. INFO.: DE 1999-19905069 A 19990208
WO 2000-EP954 W 20000207
US 2000-499203 A3 20000208

AB An alternansucrase-encoding gene from *L. mesenteroides*, vectors containing the gene, and recombinant plant cells and transgenic plants expressing this gene are disclosed. Methods for producing alternan or fructose using the enzyme and use of the alternan in cosmetics and foods are further disclosed.

L4 ANSWER 4 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:208416 CAPLUS

DOCUMENT NUMBER: 131:18050

TITLE: Production of alternan by *Leuconostoc mesenteroides* CBI-110

AUTHOR(S): Jung, Ho-Kwon; Kim, Kwang-Nyun; Lee, Hong-Seok; Jung, Sun-Ho

CORPORATE SOURCE: Seoul, 184-11, S. Korea

SOURCE: Sanop Misaengmul Hakhoechi (1999), 27(1), 35-40

CODEN: SMHAEH; ISSN: 0257-2389

PUBLISHER: Korean Society for Applied Microbiology

DOCUMENT TYPE: Journal

LANGUAGE: Korean

AB Alternan known as a kind of dextran is a linear and cyclic polysaccharide which is synthesized with sucrose by alternansucrase (EC 2.4.1.140) of *Leuconostoc mesenteroides*. But this polysaccharide is different from dextran in its structure and other properties. For the purpose of applying alternan for the food, cosmetic, and pharmaceutical industries, we isolated an excellent alternan-producing strain, *Leu. mesenteroides* CBI-110. The optimum culture conditions were studied to improve the yield, and the activity of alternansucrase was increased up to 33U/mL in the optimum culture media. The concns. of Mn²⁺ and Cu²⁺ ions were 0.01% and 0.03%, resp., for the effective production of alternan. Finally, we obtained 25.6 g/L of alternan.

L4 ANSWER 5 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1998:213863 CAPLUS

DOCUMENT NUMBER: 128:281811

TITLE: Alternan and highly branched limit dextrans: low-viscosity polysaccharides as potential new food ingredients

AUTHOR(S): Cote, Gregory L.; Leathers, Timothy D.; Ahlgren, Jeffrey A.; Wyckoff, Herbert A.; Hayman, G. Thomas; Biely, Peter

CORPORATE SOURCE: National Center for Agricultural Utilization Research, Agricultural Research Service, Biopolymer Research Unit, United States Department of Agriculture, Peoria,

IL, USA
SOURCE: Chemistry of Novel Foods, developed from a Symposium
at the International Chemical Congress of Pacific
Basin Societies, Honolulu, Dec. 17-22, 1995 (
1997), Meeting Date 1995, 95-110. Editor(s):
Spanier, Arthur M. Allured: Carol Stream, Ill.
CODEN: 65UZAE

DOCUMENT TYPE: Conference; General Review

LANGUAGE: English

AB A review with 70 refs. Alternan is an unusual microbial
polysaccharide consisting of an alternating sequence of
 $\alpha(1\rightarrow3)$ and $\alpha(1\rightarrow6)$ -linked D-glucose units. Chemical
related to dextran, it is produced from sucrose by a single extracellular
enzyme from certain strains of the lactic-acid bacterium *Leuconostoc*
mesenteroides. Because of its unusual linkage structure, alternan
is resistant to many hydrolytic enzymes that degrade starch, dextran, and
other α -D-glucans. The viscosity of alternan is
relatively low compared with most food gums. These properties
have caused us to consider alternan for a number of food
-related applications, including use as a reduced-calorie bulking agent.
This paper describes some recent work on the characterization and production
of alternan, as well as some related work on highly branched
limit dextrans.

REFERENCE COUNT: 70 THERE ARE 70 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1997:542515 CAPLUS

DOCUMENT NUMBER: 127:186629

TITLE: Sugar-transferring enzyme recombinant expression,
polysaccharide modification in vitro and in transgenic
plant, and uses in food and non-food industry

INVENTOR(S): Turk, Stefanus Cornelis Hendrikus Jozef; Gerrits,
Nathalie; Smeekens, Josephus Christianus Maria;
Weisbeek, Petrus Jacobus

PATENT ASSIGNEE(S): D.J. Van Der Have B.V., Neth.; Turk, Stefanus Cornelis
Hendrikus Jozef; Gerrits, Nathalie; Smeekens, Josephus
Christianus Maria; Weisbeek, Petrus Jacobus

SOURCE: PCT Int. Appl., 56 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Dutch

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9729186	A1	19970814	WO 1997-NL39	19970207 <--
W:	AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN			
RW:	KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
NL 1002275	C2	19970808	NL 1996-1002275	19960207 <--
CA 2245818	A1	19970814	CA 1997-2245818	19970207 <--

AU 9716745	A	19970828	AU 1997-16745	19970207 <--
AU 732087	B2	20010412		
EP 1015562	A1	20000705	EP 1997-902728	19970207 <--
EP 1015562	B1	20070829		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, AL				
AT 371726	T	20070915	AT 1997-902728	19970207
US 2002170092	A1	20021114	US 2002-112797	20020329 <--
PRIORITY APPLN. INFO.:			NL 1996-1002275	A 19960207
			WO 1997-NL39	W 19970207
			US 1999-117232	A1 19990301

AB The present invention relates to a method for manufacturing modified polysaccharides comprising placing the polysaccharide in contact with a sugar group-transferring enzyme and a sugar group donor. The placing of the polysaccharide in contact with a sugar group-transferring enzyme and a sugar group donor can be effected in vivo as well as in vitro. The result of the method is modified polysaccharides which can be used for different food and non-food applications. Examples include use of *Bacillus subtilis* gene *sacB* levan sucrase or *Leuconostoc mesenteroides* dextran sucrase. Enzymes produced in transgenic tobacco or potato chloroplasts result in altered starch granules and polysaccharide accumulation.

L4 ANSWER 7 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1973:427989 CAPLUS
DOCUMENT NUMBER: 79:27989
ORIGINAL REFERENCE NO.: 79:4505a,4508a
TITLE: Stachybotryotoxicosis
AUTHOR(S): Forgacs, Joseph
CORPORATE SOURCE: Autom. Biochem. Lab., Ramapo Gen. Hosp., Spring Valley, NY, USA
SOURCE: Microbial Toxins (1972), Volume 8, 95-128.
Editor(s): Kadis, Solomon. Academic: New York, N. Y.
CODEN: 22HAAD
DOCUMENT TYPE: Conference; General Review
LANGUAGE: English

AB Stachybotryotoxicosis, which occurs in the U.S.S.R. and is attributed to stachybotryotoxin [12698-94-1] produced by *Stachybotrys alternans* and related fungal infections of food, is reviewed with 57 refs.

L4 ANSWER 8 OF 28 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1963:485354 CAPLUS
DOCUMENT NUMBER: 59:85354
ORIGINAL REFERENCE NO.: 59:15853e-f
TITLE: Antifungal effect of trimethylammonium 2,4,5-trichlorophenoxide on foods
AUTHOR(S): Omori, Hidesato; Yamada, Kinjiro
CORPORATE SOURCE: Tokai Fisheries Expt. Sta., Tokyo
SOURCE: Nippon Shokuhin Kogyo Gakkaishi (1962), 9(3), 115-17
CODEN: NSKGAX; ISSN: 0029-0394
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable

AB Less than 1-5 p.p.m. trimethylammonium 2,4,5-trichlorophenoxide (I) inhibited the growth of *Mucor alternans*, *Rhizopus nigricans*, *R. japonicus*, *Aspergillus oryzae*, *A. glaucus*, *A. gymnosardae*, *A. sulphureus*, *A. ochraceus*, *A. niger*, *Penicillium glaucum*, *P. luteum*, *P. brevicaulis*, *P. funiculosum*, and *P. notatum*. I prevented the growth of mold on

foods at 10-70 p.p.m.

L4 ANSWER 9 OF 28 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
ACCESSION NUMBER: 1996:376566 BIOSIS
DOCUMENT NUMBER: PREV199699098922
TITLE: The mesmerizing wart: The pollination strategy of epiphytic
lady slipper orchid *Paphiopedilum villosum* (Lindl.) Stein
(Orchidaceae).
AUTHOR(S): Banziger, Hans
CORPORATE SOURCE: Dep. Entomol., Fac. Agric., Chiang Mai Univ., Chiang Mai
50200, Thailand
SOURCE: Botanical Journal of the Linnean Society, (1996)
Vol. 121, No. 1, pp. 59-90.
CODEN: BJLSAF. ISSN: 0024-4074.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 26 Aug 1996
Last Updated on STN: 26 Aug 1996

AB *Paphiopedilum villosum* was studied in hill evergreen forests (at up to 35 m above ground level) in North Thailand between 1990 and 1994. Flowering lasted 4.5 months: flower longevity 2-3 months. During 224 hours of flower-watching, less than 100 specimens of Syrphidae (Diptera) were seen in the vicinity of the flowers; 15 cases of pollen acquisition were mainly by female *Episyrphus alternans*, *Syrphus fulvifacies*, *Betajyrphus serarius* among 6 spp. of pollinators. Populations peaked during the main flower opening period, one month before the maximum number of open flowers was reached in early February. The flowers are 'kettle-traps' without known reward, luring mainly by food deception. Long distance attraction is probably by a urine-like odour (attraction to mammalian excretions had hitherto been little reported) and colour contrast. Close range lure is by the glittering staminode (probably mimicking droplets of honeydew/moisture) centered by a slippery wart (faking a perch) at which pollinators fly, immediately losing their grip and tumbling into the pouch, preventing wing action and falling being disrupted by a trough-shaped frame. Escape is up the tunnel, past the stigma, to the exit where, pressed by several mechanisms against the anther, the hoverfly scoops off very sticky pollen which has a viability of at least 8 weeks. Capsule formation averaged 8%.

L4 ANSWER 10 OF 28 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN
ACCESSION NUMBER: 1993:185514 BIOSIS
DOCUMENT NUMBER: PREV199395095964
TITLE: Mycobiota of Acipenseridae in the Volga-Caspian basin.
AUTHOR(S): Lartseva, L. V.
CORPORATE SOURCE: Casp. Res. Inst. Fish., Astrakhan, Russia
SOURCE: Mikologiya i Fitopatologiya, (1992) Vol. 26, No. 1, pp. 23-26.
CODEN: MIFIB2. ISSN: 0026-3648.
DOCUMENT TYPE: Article
LANGUAGE: Russian
ENTRY DATE: Entered STN: 9 Apr 1993
Last Updated on STN: 9 Apr 1993

AB Mycobiota was studied in the eggs, milt, muscles, and liver of sturgeons and sevryugas. The following species were identified: *Stachybotrys alternans*, *Cladosporium* sp., *C. herbarum*, *Curvularia* sp., *Stemphylium* sp., *Alternaria* sp., *A. alternata*, *Aspergillus carbonarius*,

Fusarium sp., F. gibbosum, Penicillium sp., P. chrysogenum, P. expansum and Rhizopus nigricans. Fusarium and Penicillium species predominated in 43 strains isolated (39% and 18.6% respectively). The spores of the fungi are able to accumulate in the fish. High salt resistance of these saprotrophic fungi results in the contamination of final fish food products.

L4 ANSWER 11 OF 28 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 1982:273420 BIOSIS
DOCUMENT NUMBER: PREV198274045900; BA74:45900
TITLE: OCCURRENCE AND BIOLOGY OF THE CELERY WEEVIL
HYPERA-ADSPERSA-VAR-ALTERNANS COLEOPTERA CURCULIONIDAE IN
HOKKAIDO JAPAN.
AUTHOR(S): SAKAMOTO Y [Reprint author]; KIKUTA H; NIKKUNI T
CORPORATE SOURCE: LAB OF APPLIED ENTOMOLOGY, THE JUNIOR COLLEGE OF DAIRYING,
EBETSU, HOKKAIDO, 069-01, JAPAN
SOURCE: Journal of the College of Dairying (Ebetsu), (1981
) Vol. 9, No. 1, pp. 91-100.
CODEN: JCDADV. ISSN: 0069-570X.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH

AB In 1980, the presence of celery weevil (H. adspersa var. alternans) was established in Hokkaido, Japan. This weevil was known as a pest of celery crops in Europe and in 1 rare example it was reported as attacking alfalfa in Russia [USSR]. The species of hyperinuous weevil in Japan are distinguished by the scale form on elytra. In the case of celery weevil, lobation on the scale is of the smallest degree, and there are some small notches present within the lobation. The hind wings are very small and due to this fact it is almost impossible for the weevils to fly and become distributed. The weevil generally overwinters only in the adult stage. In spring, the weevils oviposit. Egg-laying last .apprx. 40 days, with 1 female laying 200-500 eggs. Incubation is 6 days at 20° C. The larvae feed on Umbelliferous plants for 10 days at 20° C. The pupal stage lasts 6 days. In Hokkaido, most the weevils left food plants in mid-Aug. There is probably only 1 generation of insects/yr.

L4 ANSWER 12 OF 28 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 1977:173170 BIOSIS
DOCUMENT NUMBER: PREV197763068034; BA63:68034
TITLE: FOOD PREFERENCES OF 5 SPECIES OF CARABIDS COMMONLY FOUND IN
IOWA CORN FIELDS.
AUTHOR(S): BEST R L; BEEGLE C C
SOURCE: Environmental Entomology, (1977) Vol. 6, No. 1,
pp. 9-12.
CODEN: EVETBX. ISSN: 0046-225X.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: Unavailable

AB Food preferences of 5 spp. of adult carabids, Scarites substriatus Haldeman Evarthrus alternans, Casey Pterostichus chalcites, Say, P. lucublandus Say and Harpalus pensylvanicus De Geer were investigated under laboratory conditions. Various plant and animal material, as well as detritus were tested. Dead black cutworm larvae were the most preferred food for all species tested. H.

pensylvanicus and *E. alternans* did, however, feed on a number of seeds. *H. pensylvanicus* may be quite omnivorous in its feeding habits. In general, dead crickets and both live and dead smooth-skinned Lepidoptera larvae were attractive food items, while isopods, phalangids, slugs and earthworms were not. *E. alternans*, *P. lucublandus* and *H. pensylvanicus* significantly preferred dead invertebrates over live ones. The attractiveness of dead animal material has special significance. The application of insecticides, which kill large numbers of insects, may be indirectly poisoning potential predators because of the carabid's willingness to feed on dead or dying insects.

L4 ANSWER 13 OF 28 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 1976:199085 BIOSIS
DOCUMENT NUMBER: PREV197662029085; BA62:29085
TITLE: STACHYBOTRYO TOXICOSIS AND IMMUNO SUPPRESSION.
AUTHOR(S): DANKO G
SOURCE: International Journal of Environmental Studies, (1975) Vol. 8, No. 3, pp. 209-211.
CODEN: IJEVAW. ISSN: 0020-7233.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: Unavailable

AB Stachybotryotoxicosis in cattle is caused by straw and hay that is contaminated with the mold *Stachybotrys alternans*. Upon autopsy, large hemorrhages, ulcers (some dried), dried necrotic foci and degenerate areas, mycelia and *Mucor*-type fungi have been discovered. *S. alternans* did not grow in the internal organs, as determined by experimental infection and field studies. Development of lesions may be caused by secondary molds. The toxin *S. alternans* reduces the number of immunocompetent leukocytes, hindering the immunoreactions of the organism and the formation of immunoglobulins and thus immunosuppression. An immunosuppressive effect must be considered in regard to other fungal toxicosis. Facultative pathogenic microorganisms can cause mass diseases and death of animals fed with toxic food, and this is in consequence of an immunosuppressive effect. The active immunization (vaccination) of such animals is unsuccessful.

L4 ANSWER 14 OF 28 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 1974:224562 BIOSIS
DOCUMENT NUMBER: PREV197458054256; BA58:54256
TITLE: A MEDIUM FOR RAPID IDENTIFICATION AND ENUMERATION OF ASPERGILLUS-FLAVUS AND RELATED ORGANISMS.
AUTHOR(S): BOTHAST R J; FENNELL D I
SOURCE: Mycologia, (1974) Vol. 66, No. 2, pp. 365-369.
CODEN: MYCOAE. ISSN: 0027-5514.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: Unavailable

L4 ANSWER 15 OF 28 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 1973:155511 BIOSIS
DOCUMENT NUMBER: PREV197355055504; BA55:55504
TITLE: PARASITES HYMENOPTERA ICHNEUMONIDAE OF THE MOST IMPORTANT INSECT PESTS OF FRUIT AND FOREST PLANTINGS OF WESTERN

PAMIR.
AUTHOR(S): MALYAVIN I S
SOURCE: Izvestiya Akademii Nauk Tadzhikskoi SSR Otdelenie
Biologicheskikh Nauk, (1971) No. 3, pp. 51-55.
CODEN: ITOBAB. ISSN: 0002-3477.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: Unavailable

L4 ANSWER 16 OF 28 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on
STN

ACCESSION NUMBER: 1951:6478 BIOSIS
DOCUMENT NUMBER: PREV19512500006501; BA25:6501
TITLE: Notes on the life cycle of certain introduced cerambycid
beetles.
AUTHOR(S): SWEZEY, O. H.
CORPORATE SOURCE: Expt Sta., H. S. P. A., Honolulu
SOURCE: PROC HAWAIIAN ENT SOC, (1950) Vol. 14, No. 1, pp.
187-188.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: Unavailable
ENTRY DATE: Entered STN: May 2007
Last Updated on STN: May 2007

AB The following cerambycid beetles were reared in Honolulu from pruned-off
branches of the breadfruit tree, under circumstances indicating that their
life cycles were rather short, not more than 4 mos. Lagocheirus
obsoletus, Oopsis nutatdr, Pterolophia camura, Sybra alternans.
The larval period is apparently determined by the condition of the
food supply. As the larvae feed in the fermenting and decaying
outer wood, they must obtain their growth before these food
materials become too much dried up. They bore into the wood to form pupal
cells for final transformation. ABSTRACT AUTHORS: O. H. Swezey

L4 ANSWER 17 OF 28 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on
STN

ACCESSION NUMBER: 1934:11562 BIOSIS
DOCUMENT NUMBER: PREV19340800011595; BA08:11595
TITLE: image] On the biology of D. d.
AUTHOR(S): ZORINA, L. M.
SOURCE: [BULL LENINGRAD INST CONTROL FARM AND FOREST PESTS], (
1932) Vol. 2, pp. 143-147.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: Unavailable
ENTRY DATE: Entered STN: May 2007
Last Updated on STN: May 2007

AB Description of the larvae and pupae is given with notes on the
food plants, life history and habits. At the Kaial'sk Exp. Stat.
of medicinal plants (North Caucasus) 40% of the larvae and pupae were
parasitised by Orgilus claripennis, Chalcis rugulosa, Thyella (Nemorilla)
floralis, Pimpla alternans, and Pn stomerus orbitalis. The
following parasites were bred from the larvae and pupae of D. depressella
by Shirankov and Strukova: Cremastus discoidalis, C. dalmatinus, Anilastus
carbonarius, Pimpla ovalis, Habrocytus obscurus, Pachyneuron sp., and
Nemorilla floralis. ABSTRACT AUTHORS: V. Rimsky-Korsakoff

L4 ANSWER 18 OF 28 BIOSIS COPYRIGHT (c) 2007 The Thomson Corporation on STN

ACCESSION NUMBER: 1930:28827 BIOSIS
DOCUMENT NUMBER: PREV19300400028898; BA04:28898
TITLE: Notes on the breeding habits of *Culex fatigans* Wied. , and its associated mosquitoes in Queensland.
AUTHOR(S): HAMLYN-HARRIS, R.
SOURCE: PROC ROY SOC QUEENSLAND, (1928 (1929)) Vol. 40, pp. 91-103.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: Unavailable
ENTRY DATE: Entered STN: May 2007
Last Updated on STN: May 2007

AB C. fatigans is found associated with 9 species of mosquitoes in the Greater Brisbane area. The association is dependent largely on the state of the water at time of selection. There exist cyclic variations in the associations referred to, due to rain and atmospheric conditions, in which temperature and humidity play no small part. The study of pH throws no light on

the reason for selection, but only serves as an indication of the type of water preferred by certain kinds of foodstuffs, organisms, or aquatic vegetation. There is considerable mortality among the developmental stages of *C. fatigans* at all times, but especially during hot summer weather. Investigations into the breeding of mosquitoes in the Brisbane cemeteries lead to the belief that *C. fatigans* and *Aedes notoscriptus* choose the artificial receptacles on graves more than other mosquitoes; while *Aedes argenteus* prefers vessels near human habitations. *Mucidus alternans*, a cannibalistic species, and *Aedes* (0.) *vigilax*, usually associated with it, are both by nature saltwater marsh mosquitoes, but their presence at certain times of the year in large numbers in fresh waterholes is significant and highly undesirable. When these occur in association with *A. vittiger* it is interesting to note that, in spite of the fact that larvae of *A. vittiger* are predaceous, they will, nevertheless, avoid any intercourse with the other 2 mosquitoes even if found in the same water, and will select a secluded spot where they are less liable to attack. Observations show that the Charophyta referred to here, and which are comparatively common around Brisbane, do not thrive in pollution; hence, when mosquito larvae exist in conjunction with *Nitella* in the field, it is usually in the company of *A. annulipes* and with other sylvan mosquitoes rather than with *C. fatigans*. Under laboratory conditions, however, it is common for *C. fatigans* to lay egg-rafts on *Nitella* water, though *A. argenteus* selectively seems to do so more frequently. Though the presence of food seems to be the determining factor in the selection of breeding places by *C. fatigans*, the number and quality of decomposition products in the water may be said to be the main determining factors with regard to its measure of retardation in development. The possibilities of the septic tank and tannery pits as breeding grounds for *C. fatigans* must be recognized in any active anti-mosquito campaign. ABSTRACT AUTHORS: From author's summary and conclusions

L4 ANSWER 19 OF 28 FROSTI COPYRIGHT 2007 LFRA on STN

ACCESSION NUMBER: 612571 FROSTI
TITLE: Nucleic acid molecules encoding alternansucrase.
INVENTOR: Kossmann J.; Welsh T.; Quanz M.; Knuth K.
PATENT ASSIGNEE: Max-Planck-Gesellschaft zur Forderung der

Wissenschaften eV
SOURCE: United States Patent
PATENT INFORMATION: US 6570065 B 20030527
WO 2000047727
APPLICATION INFORMATION: 20000208
PRIORITY INFORMATION: Germany, Federal Republic of 19990208
NOTE: 20030527
DOCUMENT TYPE: Patent
LANGUAGE: English
SUMMARY LANGUAGE: English

AB Nucleic acid molecules encoding alternansucrase are described, as are vectors, host cells and plant cells transformed by the nucleic acid molecules and plants containing them. Transgenic plants that synthesize the carbohydrate alternan as a result of the transformation are also described. Alternan is a polysaccharide, apparently branched, which may be used as a carrier for pharmaceutically active compounds or as an additive in the food industry.

L4 ANSWER 20 OF 28 FROSTI COPYRIGHT 2007 LFRA on STN
ACCESSION NUMBER: 612505 FROSTI
TITLE: Production of cyclic alternan tetrasaccharides from oligosaccharide substrates.
INVENTOR: Cote G.L.
PATENT ASSIGNEE: Department of Agriculture (Washington; USA)
SOURCE: United States Patent
PATENT INFORMATION: US 6562600 B 20030513
APPLICATION INFORMATION: 20010625
NOTE: 20030513
DOCUMENT TYPE: Patent
LANGUAGE: English
SUMMARY LANGUAGE: English

AB A novel method for the production of cyclic alternan tetrasaccharide makes use of readily available polysaccharides or oligosaccharides, particularly starch. The invention is based on the discovery that cyclic alternan tetrasaccharide may be produced by alternanase hydrolysis of complex carbohydrates other than alternan. The process can be performed using other substrates such as panose, which may be produced from polysaccharides or oligosaccharides, including starch, maltose, pullulan and their mixtures. The resulting product may be used as a metal salt complexing agent, a sucrose substitute, and as bulking agents in foods.

L4 ANSWER 21 OF 28 FROSTI COPYRIGHT 2007 LFRA on STN
ACCESSION NUMBER: 569638 FROSTI
TITLE: Nucleic acid molecules encoding alternansucrase.
INVENTOR: Kossmann J.; Welsh T.; Quanz M.; Knuth K.
PATENT ASSIGNEE: Planttec Biotechnologie GmbH Forschung und Entwicklung; Max-Planck-Gesellschaft zur Forderung der Wissenschaften EV
SOURCE: European Patent Application
PATENT INFORMATION: EP 1151085 A2
WO 2000047727 20000817
APPLICATION INFORMATION: 20000207
PRIORITY INFORMATION: Germany, Federal Republic of 19990208
DOCUMENT TYPE: Patent
LANGUAGE: English
SUMMARY LANGUAGE: English

AB Nucleic acid molecules encoding alternansucrase are described, as are vectors, host cells and plant cells transformed by the nucleic acid molecules and plants containing them. Transgenic plants that synthesize the carbohydrate alternan as a result of the transformation are also described. Alternan is a polysaccharide, apparently branched, which may be used as a carrier for pharmaceutically active compounds or as an additive in the food industry.

L4 ANSWER 22 OF 28 FROSTI COPYRIGHT 2007 LFRA on STN

ACCESSION NUMBER: 456690 FROSTI
TITLE: Screening method and strains to produce more alternan than dextran.
INVENTOR: Leathers T.D.; Hayman G.T.; Cote G.L.
PATENT ASSIGNEE: Secretary; US Department of Agriculture
SOURCE: European Patent Application
PATENT INFORMATION: EP 804545
WO 9604365 19960215
APPLICATION INFORMATION: 19950731
PRIORITY INFORMATION: United States 19940802
DOCUMENT TYPE: Patent
LANGUAGE: English
SUMMARY LANGUAGE: English

AB Alternan is a unique alpha-D-glucan soluble glucose-polysaccharide, in which alternating alpha-(1-6) and alpha-(1-3) linkages predominate in the polysaccharide backbone. Alternan and its low-molecular-weight derivatives have functional characteristics resembling gum arabic, maltodextrin or polydextrose, and have potential value as non-caloric, carbohydrate-based food additives in artificially sweetened foods. This invention describes a rapid screening procedure for selecting microorganisms that produce a high proportion of alternan to dextran, and a high proportion of alternan sucrose to dextran sucrose. Strains selected by the method can be used to produce alternan by cultivation of the strains on sucrose, or to produce alternansucrase, which can then be used to produce alternan from sucrose enzymically.

L4 ANSWER 23 OF 28 FROSTI COPYRIGHT 2007 LFRA on STN

ACCESSION NUMBER: 440799 FROSTI
TITLE: 'Diabetic' or sugar-free foods.
AUTHOR: Matz S.A.
SOURCE: Formulating and processing dietetic foods., Published by: Pan-Tech International, McAllen, 1996, 25-42 (0 ref.)
Matz S.A.
ISBN: 0-942849-13-2
DOCUMENT TYPE: Book Article
LANGUAGE: English

AB Consideration is given to the effects of simple and complex sugars, and food types on blood glucose levels; sugar-free bread; and bulking agents to replace sugar. The following bulking agents are briefly discussed: sugar alcohols - maltodextrins, polyols, hydrogenated starch hydrolysates, isomalt, lactitol, maltitol, mannitol, sorbitol and xylitol; and poorly digestible oligosaccharides - alternan, inulin and polydextrose. In addition, the digestibility and application of resistant starch (e.g. in bakery products) are addressed.

L4 ANSWER 24 OF 28 FROSTI COPYRIGHT 2007 LFRA on STN

ACCESSION NUMBER: 439737 FROSTI
TITLE: Chemistry of novel foods: proceedings of a symposium,
Honolulu, December 1995.
AUTHOR: Spanier A.M.; Tamura M.; Okai H.; Mills O.
SOURCE: Published by: Allured Publishing Corporation, Carol
Stream, 1997, 381pp
ISBN: 0-931710-57-X

DOCUMENT TYPE: Book
LANGUAGE: English

AB The book reviews developments of new products and ingredients in the following areas: (i) flavours (flavour peptides, and the NExT STEP flavour enhancer), (ii) sweeteners (alternan and highly branched limit dextrans), (iii) a novel edible marine oil from seal blubber, (iv) fruits and vegetables (leaf concentrate, ambersweet citrus hybrid, high oleic peanuts, and fruit puree-based packaging films and coatings), (v) dairy related products (whey protein concentrate and caseinate gels in fish products, novel dairy beverages, and novel ingredients from surplus milkfat), (vi) muscle foods and related products (genetic engineering and carcass composition, dry-cured ham, nitrite-free cured meats, and temperature-tolerant fish protein gels), and (vii) novel food additives (endothelin antagonists as food additives, oligopeptides with angiotensin-I-converting enzyme inhibitory activity). New developments in the understanding of flavour perception, and the structure of sweet and bitter compounds are also reviewed.

L4 ANSWER 25 OF 28 FROSTI COPYRIGHT 2007 LFRA on STN

ACCESSION NUMBER: 326689 FROSTI
TITLE: Recent developments in food hydrocolloids.
AUTHOR: Marrs W.M.
SOURCE: European food and drink directory, 1993-94., Published
by: Contract Communications Ltd, London, 1993
, 31-77 (0 ref.)
Contract Communications Limited.
ISBN: 0-951-5601-3-1

NOTE: REFERENCE ONLY
DOCUMENT TYPE: Book Article
LANGUAGE: English

AB The author describes various types of hydrocolloids used as functional ingredients by the food industry. These include microparticulate starches, maltodextrins, low-calorie dextrin, high-amylose maize starch, galactomannans, trehalose, inulin, polydextrose, isomalt, alternan, proteins, microgels, cellulose and fibre extracts. Examples of hydrocolloid interactions that increase their functionality are discussed. The directory lists manufacturers and suppliers of food ingredients, arranged alphabetically according to ingredient type.

L4 ANSWER 26 OF 28 FROSTI COPYRIGHT 2007 LFRA on STN

ACCESSION NUMBER: 296652 FROSTI
TITLE: Low-viscosity alpha-D-glucan fractions derived from
sucrose which are resistant to enzymatic digestion.
AUTHOR: Cote G.L.
SOURCE: Carbohydrate Polymers, 1992, 19 (4), 249-52
(15 ref.)
DOCUMENT TYPE: Journal
LANGUAGE: English

SUMMARY LANGUAGE: English

AB Owing to the lack of supply and the high cost of gum arabic, there is a need for a highly soluble, relatively low-viscosity alternative gum. There is also a need for reduced-calorie or non-caloric bulking agents and fillers for use in artificially sweetened foods. This paper investigated the properties of native alternan, which is an alternating alpha-D-glucan produced from sucrose by the extracellular enzyme system of a strain of *Leuconostoc mesenteroides*, and low-molecular-weight fractions of alternan. The authors conclude that glucan preparations may be of use as non-digestible, non-caloric, carbohydrate-based, soluble fillers and bulking agents in certain artificially sweetened food preparations and would have certain advantages over gum arabic and other, similar gums.

L4 ANSWER 27 OF 28 FROSTI COPYRIGHT 2007 LFRA on STN

ACCESSION NUMBER: 295408 FROSTI
TITLE: Byproduct of sugar acts as low-calorie bulking agent.
AUTHOR: Meinhold N.M.
SOURCE: Food Processing (Chicago), 1992, 53 (2),
supplement 'Foods of Tomorrow', 58 (0 ref.)
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The production of an enzyme by *Leuconostoc mesenteroides*, which can split sugar into fructose and a long-chain polymer known as alternan, is currently under investigation by scientists. Alternan may be used as a cheap substitute for gum arabic, maltodextrins and other non-calorific food components. Technologies for the mass production of alternan are under development. Possible applications are suggested.

L4 ANSWER 28 OF 28 FROSTI COPYRIGHT 2007 LFRA on STN

ACCESSION NUMBER: 20259 FROSTI
TITLE: Fungus metabolites toxic to animals.
AUTHOR: Mirocha C.J.; Christensen C.M.
SOURCE: Annual Review of Phytopathology, 1974, 12
303-30 (Microbiol Abstr. 1975, 10 (10), Abstr. No.
10A6912).
DOCUMENT TYPE: Journal

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